

Title (en)
METHOD FOR PRODUCING BONDED OBJECT AND SEMICONDUCTOR DEVICE AND COPPER BONDING PASTE

Title (de)
VERFAHREN ZUR HERSTELLUNG EINES VERBUNDENEN OBJEKTS UND HALBLEITERBAUELEMENT UND KUPFERVERBINDUNGSPASTE

Title (fr)
PROCÉDÉ DE FABRICATION D'OBJET COLLÉ ET DISPOSITIF SEMI-CONDUCTEUR ET PÂTE DE COLLAGE DE CUIVRE

Publication
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Application
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Priority
JP 2018044068 W 20181129

Abstract (en)
An embodiment of the present invention provides a method for producing a bonded object. The method comprises a step for preparing a laminate in which a first member, a copper bonding paste, and a second member are laminated in order and a step for sintering the copper bonding paste under a pressure of 0.1-1 MPa. The copper bonding paste contains metal particles and a dispersion medium, wherein the content of metal particles is at 50 mass% or more with respect to the total mass of the copper bonding paste, and the metal particles contain 95 mass% or more of submicro copper particles with respect to the total mass of the metal particles.

IPC 8 full level
C23C 20/04 (2006.01); **B22F 1/10** (2022.01); **H01L 21/52** (2006.01)

CPC (source: EP KR US)
B22F 1/054 (2022.01 - EP US); **B22F 1/056** (2022.01 - EP US); **B22F 1/10** (2022.01 - EP KR US); **B22F 7/00** (2013.01 - EP US); **B22F 7/064** (2013.01 - EP US); **B23K 20/026** (2013.01 - EP); **B23K 20/16** (2013.01 - EP); **B23K 20/233** (2013.01 - EP); **B23K 35/0244** (2013.01 - EP); **B23K 35/025** (2013.01 - EP); **B23K 35/302** (2013.01 - EP); **C22C 1/0425** (2013.01 - EP); **C23C 20/04** (2013.01 - EP); **H01L 23/4924** (2013.01 - KR); **H01L 24/27** (2013.01 - EP); **H01L 24/29** (2013.01 - EP US); **H01L 24/80** (2013.01 - KR); **H01L 24/83** (2013.01 - EP US); **H01L 24/84** (2013.01 - EP); **B22F 2999/00** (2013.01 - EP); **B23K 2101/40** (2018.08 - EP); **B23K 2101/42** (2018.08 - EP); **B23K 2103/08** (2018.08 - EP); **H01L 23/3121** (2013.01 - EP); **H01L 24/32** (2013.01 - EP); **H01L 24/40** (2013.01 - EP); **H01L 24/73** (2013.01 - EP); **H01L 2224/2741** (2013.01 - EP); **H01L 2224/27442** (2013.01 - EP); **H01L 2224/27848** (2013.01 - EP); **H01L 2224/29294** (2013.01 - EP US); **H01L 2224/29347** (2013.01 - EP KR US); **H01L 2224/32225** (2013.01 - EP); **H01L 2224/40225** (2013.01 - EP KR); **H01L 2224/40499** (2013.01 - EP); **H01L 2224/45099** (2013.01 - EP); **H01L 2224/48091** (2013.01 - EP); **H01L 2224/48227** (2013.01 - EP); **H01L 2224/73221** (2013.01 - EP); **H01L 2224/73263** (2013.01 - EP); **H01L 2224/73265** (2013.01 - EP); **H01L 2224/80801** (2013.01 - KR); **H01L 2224/83411** (2013.01 - EP); **H01L 2224/83416** (2013.01 - EP); **H01L 2224/83418** (2013.01 - EP); **H01L 2224/83424** (2013.01 - EP); **H01L 2224/83438** (2013.01 - EP); **H01L 2224/83439** (2013.01 - EP); **H01L 2224/83444** (2013.01 - EP); **H01L 2224/83447** (2013.01 - EP); **H01L 2224/83449** (2013.01 - EP); **H01L 2224/83455** (2013.01 - EP); **H01L 2224/83457** (2013.01 - EP); **H01L 2224/8346** (2013.01 - EP); **H01L 2224/83464** (2013.01 - EP); **H01L 2224/83466** (2013.01 - EP); **H01L 2224/83469** (2013.01 - EP); **H01L 2224/83471** (2013.01 - EP); **H01L 2224/8348** (2013.01 - EP); **H01L 2224/8384** (2013.01 - EP US); **H01L 2224/8484** (2013.01 - EP); **H01L 2224/92247** (2013.01 - EP); **H01L 2924/00014** (2013.01 - EP); **H01L 2924/10253** (2013.01 - EP); **H01L 2924/12032** (2013.01 - EP); **H01L 2924/13055** (2013.01 - EP); **H01L 2924/13091** (2013.01 - EP); **H01L 2924/181** (2013.01 - EP); **H01L 2924/3512** (2013.01 - EP)

C-Set (source: EP US)

EP

1. **H01L 2224/48091 + H01L 2924/00014**
2. **H01L 2924/181 + H01L 2924/00012**
3. **B22F 2999/00 + B22F 7/064 + B22F 1/10 + C22C 1/0425 + B22F 1/054**
4. **H01L 2224/73265 + H01L 2224/32225 + H01L 2224/48227 + H01L 2924/00012**
5. **H01L 2924/13091 + H01L 2924/00**
6. **H01L 2924/13055 + H01L 2924/00**
7. **H01L 2924/12032 + H01L 2924/00**
8. **H01L 2924/00014 + H01L 2224/45099**
9. **H01L 2224/83439 + H01L 2924/013 + H01L 2924/00013**
10. **H01L 2224/83457 + H01L 2924/013 + H01L 2924/00013**
11. **H01L 2224/83411 + H01L 2924/013 + H01L 2924/00013**
12. **H01L 2224/8348 + H01L 2924/013 + H01L 2924/00013**
13. **H01L 2224/83455 + H01L 2924/013 + H01L 2924/00013**
14. **H01L 2224/83438 + H01L 2924/01004 + H01L 2924/013 + H01L 2924/00013**
15. **H01L 2224/40499 + H01L 2924/01029 + H01L 2924/00014**
16. **H01L 2224/83418 + H01L 2924/013 + H01L 2924/00013**
17. **H01L 2224/83424 + H01L 2924/013 + H01L 2924/00013**
18. **H01L 2224/83416 + H01L 2924/013 + H01L 2924/00013**
19. **H01L 2224/29347 + H01L 2924/00014**
20. **H01L 2224/83444 + H01L 2924/013 + H01L 2924/00013**
21. **H01L 2224/45099 + H01L 2924/00014**
22. **H01L 2224/8346 + H01L 2924/013 + H01L 2924/00013**
23. **H01L 2224/83466 + H01L 2924/013 + H01L 2924/00013**
24. **H01L 2224/83471 + H01L 2924/013 + H01L 2924/00013**
25. **H01L 2224/83469 + H01L 2924/013 + H01L 2924/00013**
26. **H01L 2224/83447 + H01L 2924/013 + H01L 2924/00013**
27. **H01L 2224/83449 + H01L 2924/013 + H01L 2924/00013**
28. **H01L 2224/83464 + H01L 2924/013 + H01L 2924/00013**
29. **H01L 2224/73221 + H01L 2224/40225 + H01L 2224/48227 + H01L 2924/00**

US

B22F 2999/00 + B22F 7/064 + B22F 1/10 + C22C 1/0425 + B22F 1/054

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Designated extension state (EPC)
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